CHAPTER II

AIR QUALITY

II. AIR QUALITY

A. ISSUES AND OVERVIEW

1. Introduction

After more than four years of expressing increasingly focused concern about air quality management in Fairfax County, the past two years has seen a flurry of activity beginning in about July, 2002, principally generated by activities in the Office of the County Executive ("CE") and the Environmental Coordinating Committee ("ECC"), and apparently largely in response to concerns expressed by the Environmental Quality Advisory Council ("EQAC"). EQAC recognizes and applauds the recent efforts by the Board of Supervisors ("BOS") and county staff in promoting and encouraging clean air initiatives and practices. Some of these efforts, which are shown below, were submitted to the Environmental Protection Agency on March 1, 2004 ("EPA") as part of the State of Virginia's State Air Quality Implementation Plan ("SIP"). These efforts clearly demonstrate the Board's leadership and commitment to the idea of clean air excellence. Unless otherwise noted, the information shown on the initiatives shown below was current as of November 17, 2003.

- Gas can replacements: Portable gas cans account for a significant amount of emissions escaping into the air every day. By using newer gas cans with features such as shut off valves, harmful gasoline fumes can be reduced by 75 percent. Fairfax County currently owns an estimated 300 gas cans that can be replaced.

- Use of low Volatile Organic Compound (VOC) paints: Besides reducing emissions of ozone-forming compounds, low-VOC paints improve indoor air quality by reducing eye or respiratory irritation caused by exposure to paint fumes.

- Diesel retrofits: The Board of Supervisors has already approved reprogramming of the electronic controls on certain school buses and installation of diesel oxidation catalysts on school buses and other diesel powered county equipment. The Board approved $2 million as part of the FY 2005 Carryover Budget to begin the diesel retrofit program. In addition, funds in the amount of $1.5 million have been made available for the retrofit of the Connector buses with the catalyzed diesel particulate filters.

- Episodic ban on the use of gasoline powered lawn and garden equipment: county and contractor mowing and trimming operations will be deferred on Ozone Action days (Code Red Days), except on specialized turf areas at the golf courses and athletic field complexes. The county will continue a replacement policy to purchase low-emissions lawn and garden equipment that reduce ozone precursor emissions.

- Episodic ban on the use of VOC-containing paints: Deferring the use of VOC-containing paints and coatings on Ozone Action days (Code Red Days) will reduce VOC emissions (an ozone precursor) and overall ground-level ozone formation on Code Red Days.

- Episodic ban on the refueling of non-essential gasoline powered cars and equipment: In order to better monitor the effectiveness of this measure, a report of any refueling that occurs on a Code Red Day will be given to Agency Directors the next day. This will allow for follow-up action without restricting vital functions that require refueling.

- Episodic ban on the use of VOC-containing pesticides: Both the active and inert ingredients of many pesticides are reactive in the formation of ozone. Under this policy, county and contractor applications of pesticides would be deferred on Code Red Ozone Action days.

- Telework on Code Red days: The Board of Supervisors continues to champion this effort. The County Executive encourages teleworking on Code Red Days by encouraging approved teleworking employees to telework even if they were not scheduled for that day. Currently (August, 2004), more than 730 county employees telework two to four days per month. An expansion plan is underway to raise that number to 1,000 by 2005. Telework expansion reflects the Fairfax County Board of Supervisors' support of the regional goal set by the Metropolitan Washington Council of Governments -- to reach a level of 20 percent of the eligible workforce teleworking one day per week or more by 2005. On Thursday, October 23, 2003, the county sponsored a Telework Expo in the Government Center Atrium and Forum. The Expo was a way to inform more employees about the benefits and possibilities of telework. In addition, the Expo contained a compilation of information and activities about the county's telework effort. The Expo also recognized the departments and employees who have contributed to the county's telework effort. The Land Use and Transportation chapter contains additional discussion of telework issues.

- Participation as a Clean Air Partner: Fairfax County government has been a member of Clean Air (ENDZONE) Partners since 1998, and has been proactive in efforts to inform county employees and residents about air quality programs and ways to reduce air pollution. The county has included information about air quality issues on its Web site. The county has a notification program that involves the posting of Ozone Action Day forecasts on Fairfax County Government Cable Television Channel 16, and the county Web site, as well as sending e-mail notifications to all county employees. These messages include appropriate actions to take to reduce contributions to ozone formation. Some actions currently practiced by Fairfax County government when a Code Red Day is forecast include: the refueling of vehicles after sunset; the restriction on the use of non-essential motorized operating equipment; encouraging employees to

telework and teleconference to participate in meetings off site; and the offering of free trips on the Fairfax Connector and on Metrobus. On Tuesday, Nov. 4, at the University Conference Center and Inn at the University of Maryland's College Park campus, Fairfax County was given an honorable mention by Clean Air Partners in the category of "Outstanding Ozone Action Days Program." The county was recognized for its efforts in establishing voluntary actions to reduce ground-level ozone through an Ozone Action Days plan, its efforts to encourage and facilitate public awareness of air quality issues, and its efforts to encourage employees to take personal voluntary actions.

- Best Practices in Pesticide Application: The Fairfax County Park Authority has implemented an integrated pest management (IPM) program at golf facilities and athletic field complexes. The Park Authority's approach to select pesticide applications is one of prevention rather than a curative one. This approach greatly reduces the amount of product (VOC emissions) required to keep turf healthy and allows the IPM program to be more effective.

- Alternative Fueled Vehicle Purchases: The county favors purchase of hybrid-drive vehicles when appropriate for replacement of vehicles being retired. In addition to the 27 hybrid vehicles that have already been purchased, it is anticipated that the county will purchase an additional 30 hybrid vehicles by May 2005.

Additionally, EQAC is especially pleased with the more recent efforts of the county's Air Quality Subcommittee ("AQS"), and encourages the BOS to implement all of the recommendations that were presented by the AQS to the Board's Environmental Committee as shown in the "Clean Air Café Menu" and in the Subcommittees' interim report dated April 19, 2004 entitled "Improving Air Quality in the Washington Metropolitan Region - Fairfax County's Commitment to Air Quality Excellence - 2004 Air Quality Protection Strategy Recommendations."

Though EQAC is encouraged by this progress, we remain concerned about the timing and the focus of critical analysis associated with air quality management options and actions that may need to be taken immediately in Fairfax County. Even though the county is moving in the right direction, we are concerned that the county continues to allow and perhaps even support the atrophying of program capabilities in the Health Department that are vital to this whole effort.

While we recognize and defer to the efforts of the county to establish their own approach to the management of air quality, we are concerned that the availability of existing expertise in this area has apparently eroded, particularly in the Health Department. This is inconsistent with our recommendation and basic suggestion that, at a minimum, the county needs to maintain expertise to understand trends and consequences associated with air quality management. While the approach of the county appears to be to focus on the relationship with the Washington Metropolitan Council of Governments ("MWCOG" or "COG") and planning activities associated

with that relationship, EQAC remains extremely concerned that our ability to actually measure air quality progress in the county and understand the relationship between that progress and the atmospheric chemistry in the immediate area and in the region that contributes to that progress is actually decreasing. It is ironic that at the very time that the county has committed to substantially beefing up its efforts as they relate to air quality management, the existing expertise and institutional memory associated with health issues, past air quality trends, and the management of the air quality monitoring network in the Health Department is disappearing and is not being replaced.

a. NOx SIP Call

The NOx SIP Call continues to move forward, consistent with our descriptions over the past three years in previous Annual Reports. The SIP Call was implemented in 2003 in New England and the Mid-Atlantic, including some areas in the Metropolitan Washington Region. The program was implemented in the rest of the eastern United States, including Northern Virginia, in May, 2004. Expected net reductions as a result of this SIP Call are in the range of 60-70% and so the hope should be, as we have stated in the past, that we would see something in the neighborhood of a 20% reduction in NOx for Fairfax County as a result. These NOx reductions are an important part of the Washington region's State Implementation Plan (SIP), a plan to reduce ozone pollution in our region. Actual reductions in the metropolitan area along with reductions of transported NOx will be critical to attaining the standard during the next three ozone seasons.

A primary concern that we have with the NOx SIP Call is that it allows trading of emission credits and, as a result, emission reductions on a point source basis cannot necessarily be predicted. There are four major power plants in the Washington area and it is our understanding that in some, if not all, of these cases those power plants are emitting considerable quantities of NOx in this area as a result of decisions to purchase emission reduction allowances outside of the Washington Metropolitan air shed.[1] A particular concern for the Washington area is the Potomac River Generating Plant in Alexandria. Because the plant produced NOx emissions in 2003 well in excess of its state operating permit, the Virginia Department of Environmental Quality (DEQ) pursuing enforcement actions against the plant.

Although it should not theoretically have any direct impact on the overall effect of the NOx SIP call, the implications of New Source Review ("NSR") reform are also of concern to us since those reforms may result in additional generation of NOx at some coal burning facilities in the future.[2]

[1] Three of these plants are in Maryland (Morgentown, Chalk Point, and Dickerson) and one is in Virginia (the Potomac River Generating Plant in Alexandria).

[2] NSR notwithstanding, the NOx SIP Call mandates the achievement of fixed statewide NOx emissions budgets in Virginia by 2007. Even so, concern about this issue is apparently shared by the Metropolitan Washington Air Quality Committee ("MWAQC"), since the Chairman wrote a letter expressing concern on the subject to then Administrator Whitman in January of last year.

b. Planning for the New Eight-Hour and Particulate Matter Standards

Efforts of the EPA to develop an implementation strategy that meets the mandate of the Supreme Court upholding the new eight-hour ozone standard are ongoing. EPA published final non-attainment designations for the eight-hour ozone standard in April 2004. The Metropolitan Washington area, which includes Fairfax County, was designated a moderate non-attainment area. EPA plans to revoke the one-hour ozone standard in June 2005. Once the one-hour standard is revoked, the 8-hour standard will be in force. Over the next few years, the Washington region must develop a new SIP showing how it will attain the eight-hour ozone standard by 2010. The new SIP must be submitted to EPA by June, 2007. The Metropolitan Washington Air Quality Committee (MWAQC), the air quality planning body for the Washington region, is starting to plan for development of the eight-hour SIP and identification of additional emission control measures. All of this serves to make the point that the advent of the new eight-hour standard continues to leave little doubt that this new standard will inevitably make air quality management activities in the county considerably more difficult.

EPA is also in the process of designating non-attainment areas for particle pollution, also known as $PM_{2.5}$. The Washington region, including Fairfax County, expects to be designated non-attainment for particle pollution effective February, 2005.

The county in 2003 once again had exceedances of both the one-hour and the eight-hour standard[3]. However, the 2003 ozone season was an improvement over 2002, with fewer exceedances of both the 1-hour and 8-hour standards. As the county moves away from the one-hour standard and toward the eight-hour standard, the direct implications of chronic non-attainment, especially of the eight-hour standard, will become a much more serious matter in Fairfax County. How the county is preparing to address all of this is not yet clear to EQAC.

c. Severe Area SIP Planning

In February, 2004, MWAQC approved a new "Severe Area" SIP for submittal (by March 1, 2004) to EPA by Maryland, Virginia, and the District. Upon its redesignation as a "severe" non-attainment area in February 2003, the Washington region was required to prepare a new SIP to show compliance with the more stringent severe area requirements. An interim SIP submittal in August, 2003 fulfilled some of these requirements. The remainder of the requirements were fulfilled by the March, 2004 submittal. The new SIP includes an updated attainment demonstration reflecting revised MOBILE6-based motor vehicle emissions budgets, the demonstration of 3% per year rate of progress (ROP) from 1999-2002 as well as from 2002-2005, the adoption of contingency measures for failure to make ROP during those periods, and the submission of Reasonably Available Control Measures (RACMs). There are other requirements as well.

[3] Even though we are not yet required to meet the eight-hour standard in Fairfax County, we have monitored for "compliance" with the eight-hour standard for the past two years.

In developing this SIP, the Metropolitan Washington Air Quality Committee (MWAQC) identified a series of control measures that they believe will allow us not only to demonstrate progress toward, but in fact to attain, the ozone NAAQS (National Ambient Air Quality Standards) by November 15, 2005.[4] These include new regulations requiring redesigned fuel containers, low-VOC paints and consumer products, and changes to certain business practices that result in high VOC emissions. These regulations are in place and will be fully implemented in the Washington area by January, 2005

An additional portion of the region's emission control strategy is a "voluntary bundle" of emission reductions from innovative programs implemented by local governments. These programs include a gas can exchange, use of low-VOC paints, purchase of wind power, retrofitting of diesel school buses and purchases of alternative fueled vehicles. Fairfax County was a leader in committing to implement these critical programs.

d. Conformity Planning Requirements and Status

The purpose of conformity is to assure that planning for transportation activities is consistent with air quality management goals. In non-attainment areas such as the Metropolitan Washington Area, transportation planning cannot be allowed to proceed if: (1) it contributes to the creation of new air quality violations; (2) it contributes to the worsening of existing air quality violations; or (3) it delays the attainment of ambient air quality standards.

The August 2003 SIP submittal contained revised motor vehicle emission budgets, which were approved by EPA as of December 31, 2003. These budgets were slightly revised in the March, 2004 submittal.

EPA is in the process of developing final guidelines for conformity under the eight-hour ozone standard. These guidelines, which were issued in July, 2004, will help the Washington region develop a plan for demonstrating conformity for the eight-hour ozone standard once the one-hour standard is revoked in June, 2005.

2. Air Quality Status in Northern Virginia

a. Ground-level Ozone

The Metropolitan Washington, D.C. area, including Fairfax County, is currently classified as a severe non-attainment area for the one-hour ozone standard and a moderate non-attainment area for the eight-hour ozone standard. For all other Federal Air Quality standards, the area remains in attainment. With respect to $PM_{2.5}$, the existing primary standard is set at 15 $\mu g/m^3$ and, although compliance

[4] The details of this SIP, such as they are, can be reviewed on the COG Web site at www.mwcog.org/environment/air.

with the standard is not yet required, we exceeded the standard in 2002 and came very close to exceeding it in 2001.

b. Ozone Exceedances in 2003

Attainment of the ozone standard in the Metropolitan Washington, D.C. area will require three years with no more than three ozone exceedances at any one monitor in the region. An exceedance day (for the one-hour standard) occurs when an ozone-monitoring site exceeds the NAAQS of 124 ppb for at least one hour. In 2003, there were three ozone exceedance days for the one-hour standard in the Washington region and two exceedance days in Fairfax County.[5] On the two days of exceedances in Fairfax, one monitor registered an exceedance on only one day while another exceeded on both days.

Monitors in Fairfax County recorded violations of the eight-hour ozone standard on five days during the 2003 ozone seasons. Violations occurred at four different county monitors. The Washington region registered seven violations of the eight-hour standard during the 2003 season.

Obviously, no matter what we conclude regarding compliance with the one-hour standard (and the only conclusion is that we remain woefully out of compliance), the situation for the eight-hour standard, which will be the new standard at the end of next year, is disastrous. Any way you cut it, the picture is anything but pretty.

c. Air Quality Trends in Fairfax County

Although many believe that air quality in Fairfax County is improving, the best that can be said is that the pattern of ongoing violations of the one-hour ozone standard has continued at more or less the same level since 1994. The pattern of violations worsened considerably in 2002 and in fact ended up being as bad as, or worse than, anything we've seen since 1993. The same was generally true for the whole metropolitan area. In 2003, the county reported two exceedances of the 1-hour standard at four different sites, which is serious cause for concern given what many considered to be a much easier ozone season. Data for the entire Washington region disclose other violations at other monitors not located in the county. In 2002, there were nine Code Red days (unhealthy for all citizens) and 19 Code Orange days (unhealthy for sensitive groups). In 2003, there were three Code Red days and four Code Orange days. To summarize, 2002 saw a dramatic worsening in that trend. 2003 appears to have been more or less a replay of 2001, only worse. If we look at the eight-hour standard, the situation is much worse. This indicates

[5] Notably, there appears to be some disagreement on the actual number of exceedant days, based on the apparent position of the County that they do not have to count ozone violations at the Franconia monitor, which is operated by the state of Virginia. On the other hand, if one makes reference to the Virginia data, it discloses other violations at McLean, Chantilly and Annandale as well. I would be interesting to see what the position of the EPA is on this issue, based on the requirements of the CAA. One wonders whether the struggle within Fairfax County over the funding and maintenance of the monitoring system might in some way be related to the notion that if we don't know about violations (i.e., monitor them) they can't possibly be of concern to us.

that the county cannot afford to reduce or diminish its recent air quality planning efforts.

Table II-1
Regional Ozone Exceedances, 2003

Date	Location	Maximum One-Hour Ozone (ppm)
June 25	Mount Vernon, VA*	0.132
	Arlington, VA	0.126
	Lee Park, VA*	0.137
	Prince George's Equestrian Center, MD	0.141
	Rockville, MD	0.125
	Southern Maryland	0.133
June 26	Prince George's Equestrian Center, MD	0.137
August 14	Mount Vernon, VA*	0.127

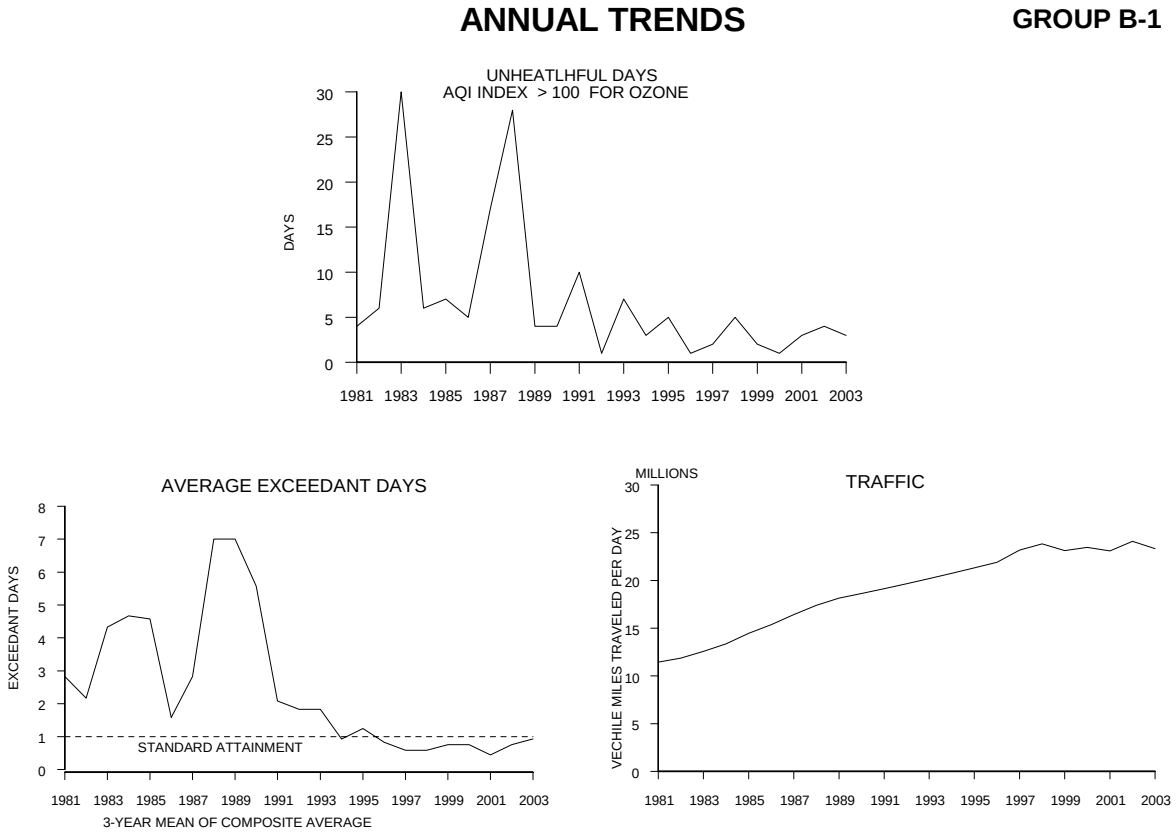
*Fairfax County Monitoring Station
Source: Metropolitan Washington Council of Governments

Table II-2
Regional Ozone Exceedances, 2003, Eight Hour Average

Date	Number of Stations that Exceeded the Standard	Maximum Value in the Metropolitan Statistical Area; Maximum 8-Hour Ozone (ppm)
June 24	14	0.107
June 25	17	0.125
June 26	16	0.126
June 30	4	0.100
August 14	4	0.95
August 22	1	0.085
August 28	1	0.086

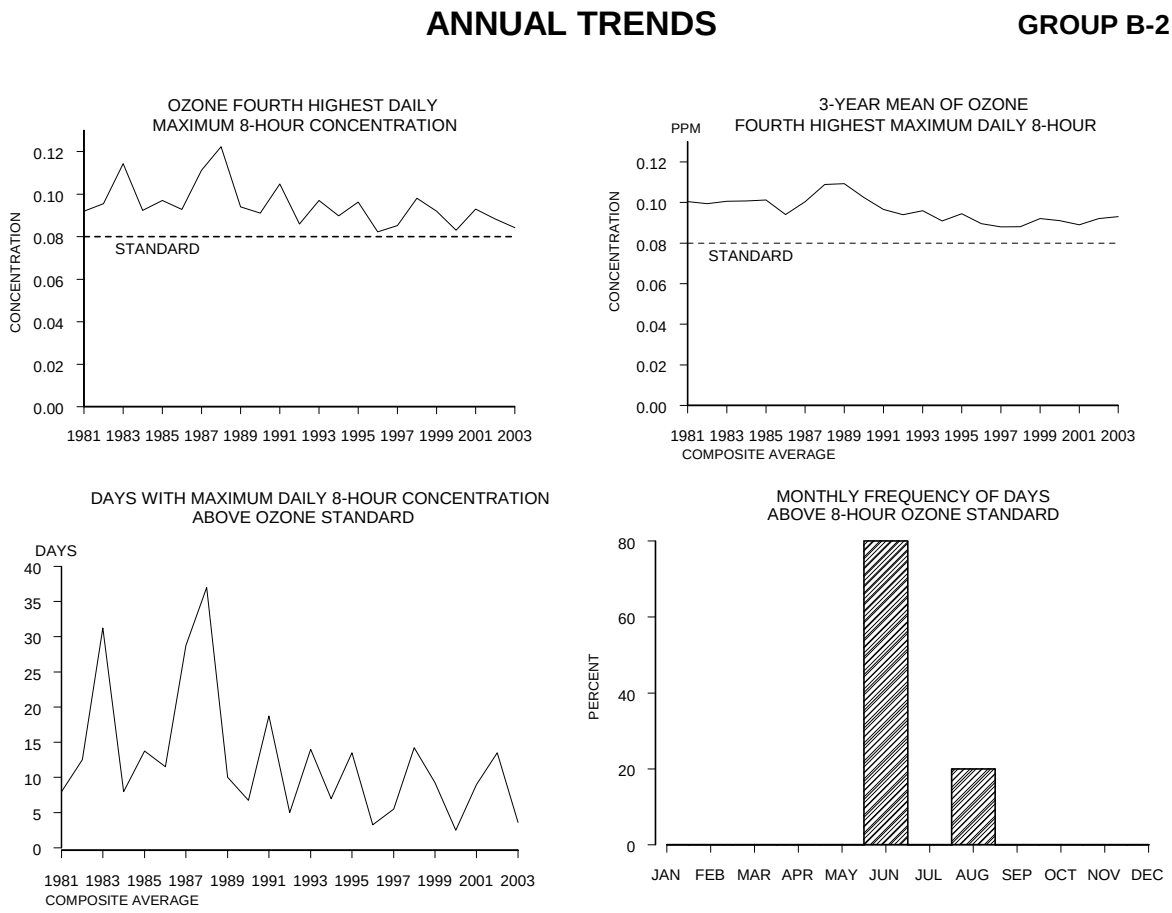
Source: Metropolitan Washington Council of Governments

Figure II-1: Air Quality Trends in Relation to a One-Hour Ozone Standard



Source: Fairfax County Department of Health

Figure II-2: Air Quality Trends in Relation to an Eight-Hour Ozone Standard



Source: Fairfax County Department of Health

B. MAJOR PUBLIC AGENCY RESPONSIBILITIES

1. Introduction

Although compliance with National Ambient Air Standards (NAAQS) and resulting air quality management responsibilities is a function of Federal law, in Fairfax County we have a bifurcated situation where these responsibilities have been split between the State of Virginia and the regional metropolitan planning organization (MPO). MPOs are set up under the CAA in metropolitan areas with populations in excess of 50,000. In more difficult situations, MPOs are multi-jurisdictional, as is the case in the Washington MPO. Members of MPOs are appointed by the governors and mayors of affected jurisdictions to represent areas included in the MPO. The MPO works with state departments of transportation and transit providers in identifying transportation needs and priorities. They make transportation investment decisions for the metropolitan area and, by default, for the individual regions encompassed within the MPO.

2. Commonwealth of Virginia

a. Virginia State Air Pollution Control Board

This Board is authorized to propose policies and procedures for air quality regulatory programs, including emissions standards for landfills and vehicles.

b. Department of Environmental Quality

This Department is responsible for establishing standards for air quality monitoring and vehicular inspection and maintenance programs.

3. Region – The National Capital Region Transportation Planning Board (TPB), the Metropolitan Washington Council of Governments (COG), and the Metropolitan Washington Air Quality Committee (MWAQC)

The TPB serves as the designated MPO for the Washington region. The TPB is staffed by the Department of Transportation Planning, which is part of COG. Members of the TPB are appointed, and Fairfax County currently has two members of the Board of Supervisors sitting on the TPB. The TPB's activities are coordinated through COG with the MWAQC, which is the designated entity responsible for air quality planning in the Metropolitan Statistical Area identified under Section 174 of the CAA. Other programs, such as those responsible for forecasting demographic changes, are also managed by COG. In this way, COG works toward solutions to regional problems related to air and water quality, transportation, and housing. COG is also responsible for issuing air quality indices on a weekly basis.

a. MWAQC Technical Advisory Committee

This Committee reviews technical issues and documents before they are submitted to MWAQC for review and approval. The Chairman of the Committee for 2004 is Hon. Dana T. Kauffman, a member of the Fairfax County Board of Supervisors.

b. Forecasting Subcommittee

This Subcommittee considers how to monitor and report the new eight-hour ozone standard and how to devise guidelines for issuing health alerts during the ozone season.

c. Attainment Subcommittee

This Subcommittee considers evidence for the case that the Washington non-attainment area can attain the one-hour ozone standard with the control measures already adopted.

d. Conformity Subcommittee

This Subcommittee reviews Air Quality Conformity Determinations prepared by the TPB to ensure that regional transportation plans are consistent with plans to improve air quality. This includes verifying that estimated emissions from mobile sources, such as cars, trucks, and buses, do not exceed the mobile budget, a cap on regional mobile emissions contained in the region's air quality plan.

e. Air Quality Public Advisory Committee

This Committee has been set up to provide a vehicle to brief citizens on actions pending before MWAQC. This Committee functions as an important source of feedback from the public on air quality concerns in the metropolitan area.

4. County of Fairfax

a. Department of Health, Division of Environmental Health, Community Health and Safety Module

This Division is authorized by the Fairfax County Code, Chapter 103, in cooperation with federal and state agencies, to conduct an air monitoring program. In the past, this Division has provided consultative services to those requesting assistance in indoor air quality issues and other air quality-related matters. If there is a substantial threat to public health, on-site investigations are supposed to be provided concerning indoor air quality and exposure to toxic substances in non-occupational, indoor environments. A representative from the Health Department should sit as a member of the MWAQC Technical Advisory Committee and function as a conduit to communicate with the county on air quality issues of

concern to MWAQC. Based on staff losses over the past year, we do not believe staff support is currently available in the Health Department to support these activities. At the present time, the county's Environmental Coordinator represents Fairfax County on the MWAQC Technical Advisory Committee.

During a time of increasing responsibility to coordinate and manage the increasingly complex body of information relevant to air quality planning in Fairfax County, it is indeed ironic that county staffing for these activities has decreased almost in proportion to the need. During the 1980s, Fairfax County maintained a fully staffed air quality management operation, and into the 1990s much of that capability remained until the 1996-1997 time-frame. Even in the face of acknowledged concern over degraded air quality, our county air quality capability has been systematically reduced to the point where the only function that can even be minimally fulfilled is monitoring. It would appear that there is some support in the county to reduce the monitoring activities, and as things stand now, we are extremely concerned about the capability of the county to carry out its obligations to maintain even existing monitoring responsibilities.

b. Department of Transportation

This agency is responsible for the planning and the coordination of improvements that reduce both congestion and the vehicle miles traveled.

C. PROGRAMS, PROJECTS, AND ANALYSES

1. Regional Air Quality Planning

In response to our recommendation in 2002 that the county establish air quality planning capabilities in the Health Department, the decision was made to identify staff responsibilities in the Office of the County Executive to coordinate air quality efforts on behalf of the county. Those efforts are evolving and EQAC is involved, in a limited way, in reviewing and advising with respect to those activities. We are not convinced that the approach to the complex issue of air quality management in the metropolitan area will succeed and a better approach, in our view, would have been to hire a full-time program manager in the Health Department, as we recommended in 2002. EQAC will continue to do everything it can to try to cooperate with the county in their efforts to identify short-term strategies that can result in compliance with the ozone NAAQS. Meanwhile, we underscore our observations over the past four years that the complex nature of regional air quality planning needs is such that the county needs independent, timely, and expert advise that is based on the authority of the agency responsible for this issue in Fairfax County, which, at the present time, is the Health Department.

While we appreciate the focus of the County Executive's Office in more proactive involvement with COG in coordinating regional planning, we continue to believe that the county needs to have a more independent basis for assessing its own air quality

planning needs. We continue to strongly advocate that the county needs professional expertise to understand the complex relationship between its own circumstances and planning requirements in order to be most effective in addressing air quality management needs in Fairfax County. We continue to be concerned, especially this year, about the need to tighten the links between planning and air quality management in the short term.

D. CONCLUSIONS AND OBSERVATIONS

1. In August of 2002, at the request of the Deputy County Executive, EQAC provided a summary of our concerns regarding air quality management needs in Fairfax County that included recommended staffing needs and related job description(s). We concluded our observations at that time by stating that "…planning capability will mean nothing unless the results of that capability can be adequately integrated into county activities." In November 2002, at about the time that we released our 2002 Annual Report recommending the hiring of a full-time air quality planner, the county embraced a two-track approach to air quality management that culminated in a series of announcements at the February 12, 2003 ECC/EQAC meeting dealing with air quality management. Since that time, EQAC interaction with the county has occurred principally through our interactions with the ECC and for the most part has been focused on long-term issues associated with the management of land-use/transportation issues associated with the Comprehensive Plan. This seems primarily to have been an outgrowth of our concerns about the possible relevance in Fairfax County of the concept of "Smart Growth". Meanwhile, in 2003 the county developed its own approach to air quality planning, and following discussions with MWAQC, developed an Air Quality Subcommittee designed to develop recommendations for the ECC and BOS on local and regional air quality issues. In April of 2004, the AQS presented its recommendations to the BOS Environmental Committee. EQAC is pleased with the work of the Subcommittee that included a variety of air quality management strategies as shown in the interim report and Clean Air Café menu that was presented to the Board's Environmental Committee. EQAC recommends that the Board adopt and implement the recommendations shown in the menu and report.

2. We seem to be at an interesting point with respect to air quality management in Fairfax County. It is laudable that the County is now focused on the issue of air quality management and that the management in the Office of the County Executive has supported efforts at lower levels to coordinate and interact on a more regular basis with COG and others involved in regional planning. We are especially pleased that the county has come forward with SIP (VOC and NOx) emission reduction strategies for both short-term ozone action days and long-term ongoing initiatives. These efforts played a significant role in the Washington region's ability to develop and submit a severe area SIP that may be more acceptable to the EPA. The pattern of ongoing violations, however, discloses a problem that requires reductions that must have immediate impacts on the actual attainment of the standard in the very near future and it is not clear, based on our analysis of the severe area SIP and the other activities that are

presently under way, how the county or, in fact, the region intends to address that problem. As indicated above, we are further concerned about the loss of key support in the Health Department to support these activities just when they are needed most.

3. Based on the discussions that have occurred between EQAC, the ECC and the Planning Commission, we understand the problems and concerns and even the limitations associated with the long range nature of land use planning as it relates to transportation and air quality. We will continue to interact in that venue to try to constructively address the issues that have been discussed there. Meanwhile, we continue to welcome the opportunity to be as interactive as possible with the Air Quality Subcommittee and its activities.

   In general, we have a basic concern that the approach of the county is neither systematic nor strategic. In this respect, we would draw the attention of those who read this report to our previous annual reports discussing the need for capability at both higher and lower levels in the system to recognize and communicate about the long-term nature of the air quality problems and the identification of real options for assisting in solving those problems in a more strategic and systematic process in line with the county's vision and policy. This will inevitably involve some thinking out of the box that is not likely to occur in the context of the Air Quality Subcommittee activities, we fear. Some of the issues that we have identified in this report reflect our limited perspective on issues that might be of concern in this context. Those issues include: (1) the concern by many people that the COG mechanism is running into some problems and may need to be modified; (2) the reality that the eight-hour standard is coming and that we will need to identify a position to address that reality very soon; (3) $PM_{2.5}$ is coming and the impacts of both $PM_{2.5}$ and the eight-hour standard on conformity need to be considered now. If this is happening, it would be welcomed news but it would be unfortunate news in the sense that if it is happening we should know about it now; (4) the NOx SIP call aside, it appears that, based on information we have received in the recent past, that we have our own NOx problems in the immediate area. Again, it may be that someone in the county is already aware of this and is acting on it, but as was just observed in the previous point, if that is the case we should have heard about it.

   The general nature of our observations here is that while we appreciate the fact that the county wishes to take hold of this problem and deal with it, we still have reason to believe that, for one reason or another, the county is not seeing the whole picture and critical information and analysis is not occurring. More importantly, the essence of this critical information and analysis is not getting into the hands of the Board of Supervisors, nor as far as we can tell, is it getting into the hands of the county Executive, either.

E. RECOMMENDATIONS

1. We recommend full funding for staff in the Health Department supporting air quality management activities in the county. With respect to air quality management, our weakness has become our institutional capability to track air quality trends and help set the stage to understand where local controls are most needed. Health Department staff are now so busy addressing other issues that they can no longer provide sufficient assistance with air quality matters. We are very concerned that our monitoring capability risks becoming compromised, and we have now heard concerns expressed about that both at the state and regional levels. We strongly support maintenance, including replacement of expertise in the county Health Department so that they can provide appropriate coordination and support for the activities for the Air Quality Subcommittee. The emphasis here, initially, needs to be on the ability to restore historic perspective on trends and atmospheric science associated with the formation of ozone. The maintenance and management of the monitoring network is critical to this exercise, and the Health Department should be in a position to provide support and management so that, if necessary, the monitoring network can be expanded. Finally, we continue to believe that Air Quality Planning capability is necessary in the Health Department.

2. We continue to be concerned about coordination and integration of critical analysis and conclusions about air quality management in the county. We recognize that the county has decided not to accept our suggested approach to staffing up for air quality management and planning purposes and have decided to pursue their own path on this subject. In general, we are pleased with the work of the AQS in identifying both quantifiable and qualifiable emission reduction measures and strategies as well as promoting clean air education programs and initiatives, however, we continue to be concerned regarding the county's ability to maintain this effort in a systematic and strategic manner. We continue to recommend close coordination and communication between EQAC and the county on immediate activities necessary to comply with the ozone standard in 2005 and on into the future.

3. EQAC is pleased with the work of the county's Air Quality Subcommittee that included a variety of air quality management strategies as shown in the interim report and Clean Air Café menu that was presented to the Board of Supervisors' Environmental Committee. EQAC recommends that the Board adopt and implement the recommendations shown in the menu and report.

LIST OF REFERENCES

2002 Annual Air Quality Report, Fairfax County Health Department, Community Health and Safety Section, Division of Environmental Health (report not officially released as of the writing of the Air Chapter of the ARE. Early draft received in October 2003 and data corrected as necessary).

Agency Responses to the Environmental Quality Advisory Council Recommendations Contained within the 2002 Annual Report on the Environment, (memorandum from the County Executive to the Board of Supervisors dated March 27, 2003).

Information for the 2002 EQAC Annual Report, (memorandum from the Acting Director, Department of Health to the Director, Department of Planning and Zoning dated June 12, 2003).

2003 Annual Report on the Environment – Regional Comments, (memorandum from the Deputy Regional Director of the Northern Virginia Regional Office to the Department of Planning and Zoning, Fairfax County, referencing information and contacts for the State of Virginia).

Virginia DEQ Web site, www.deq.state.va.us/ozone/ (information on ozone exceedances, including history).

Declaration on Air Quality Leadership, (memorandum from the County Executive to Senior Management Team dated February 12, 2003).

Implementation of Available Ozone Action Best Practices, (memorandum from the County Executive to Senior Management Team dated July 21, 2003, describing the background and objectives for the Air Quality Sub-Committee and attaching its Charter).

State Implementation Plan ("SIP" or "Severe Area SIP") to Improve Air Quality in Washington, DC – MD – VA Region, (final SIP and appendices available at the MWCOG Web site (www.mwcog.org/environment/air/)).

Air Quality Management/Fairfax County, (memorandum from the Environmental Quality Advisory Council to the Deputy County Executive dated August 28, 2002).

Correspondence dated November 15, 2002, from the Deputy County Executive to EQAC describing the intentions of the county with respect to air quality in response to the August 28, 2002, memorandum from EQAC.

Fairfax County Web site, http://www.fairfaxcounty.gov/dpwes/environmental/air.htm (information on ozone exceedances, including history and the work of the AQS).